

Applic. No.: 10/623,815
Amdt. Dated April 28, 2005
Reply to Office action of March 3, 2005

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-3 and 5-13 are in the application. Claim 1 has been amended. Claim 4 has been cancelled. Claim 13 has been added.

In the section entitled "Claim Rejections - 35 USC § 103" on pages 2-6 of the above-mentioned Office action, claims 1-12 have been rejected as being unpatentable over Shiga (US 5,416,660) in view of Chrysostomides et al. (US 5,646,434) under 35 U.S.C. § 103(a).

The rejection has been noted and claim 1 has been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found on page 11, lines 4-10 of the specification, original claim 4 as well as Fig. 1.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

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an electrostatic discharge protection element for carrying an electrostatic discharge away from said terminal for the signal and to the supply potential, said electrostatic discharge protection element being disposed outside of said semiconductor chip, said electrostatic discharge protection element being connected outside of said semiconductor chip to said further conductor track and to said first conductor track, said electrostatic discharge protection element being disposed close to said crossing location.

As can be clearly seen from Fig. 1 of the instant application, the ESD element (32) is disposed close to the crossing location formed where the further conductor track (3) crosses the first conductor track (15).

The terminals 6 of Shiga, which the Examiner has referred to as the terminal for obtaining a supply potential, are power supply terminals (see column 2, line 26). The diode 9 included in the protection circuit is connected to ground (see the anode terminal of the diode 9 in Fig. 3 and the cathode terminal of the diode 9 in Figs. 4 and 5). However, Shiga does not disclose in which way the ground potential will be delivered from one of the terminals to the ESD element 2. In particular, Shiga does not disclose a crossing location between a further conductor track (which is connected to the second conductor track connected to the terminal for obtaining a supply potential) and a first conductor track close to which the ESD protection element is located.

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The Examiner has pointed to bonding wires 6, 9 of Chrysostomides et al. in the third paragraph on page 4 of the Office action and appears to believe that the track 23 (see Fig. 5) of Chrysostomides et al. is similar to the further conductor track (3) of the invention of the instant application and that one of the bonding wires 6, 9 is similar to the first conductor (15) of the invention of the instant application. However, according to the invention of the instant application, the ESD element (32) is connected between the further conductor track (3) and the first conductor track (15) and is close to the crossing location thereof. In Chrysostomides et al. the ESD protection element 16 is not connected to the bonding wires 6, 9, and, in particular, is not disposed where the bonding wires 6, 9 cross the track 23.

In addition, it is noted that the further conductor track (3) of the invention of the instant application is defined to run outside the semiconductor chip. In contrast, the conductor track 23 of Chrysostomides et al. is an integrated conductor track and runs within the integrated circuit, which is illustrated in Fig. 5 of Chrysostomides et al.

Clearly, none of the references shows "said electrostatic discharge protection element being disposed close to said

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crossing location," as recited in claim 1 of the instant application.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

Claim 13 has been added. The support for claim 13 may be found in the figure and the corresponding description in the specification. As can be seen from the figure, the ESD protection element (33) is disposed at the crossing location of the third conductor track (14) and the further conductor track (3). Claim 13 is believed to be patentable because the above feature is not disclosed by any of the cited references as well as because it is dependent on claim 1, which is believed to be patentable as discussed above.

In view of the foregoing, reconsideration and allowance of claims 1-3 and 5-13 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call

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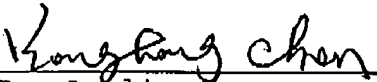
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so that, if possible, patentable language can be worked out. In the alternative, the entry of the amendment is requested as it is believed to place the application in better condition for appeal, without requiring extension of the field of search.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

Yonghong Chen
Reg. No. 56,150



For Applicant

YC

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Lerner and Greenberg, P.A.
Post Office Box 2480
Hollywood, FL 33022-2480
Tel: (954) 925-1100
Fax: (954) 925-1101